

REMARKS

Status of the Title:

The title of the invention was objected to as not being descriptive. However, Applicant respectfully traverses and submits that the title Coreless Linear Motor is indicative of the invention to which the claims are directed because each of the pending claims is explicitly directed to a “coreless linear motor.” Applicant respectfully submits that the objection to the title should be withdrawn.

Status of the Claims

Claims 27, 29-36, and 53 are currently pending, claims 28 and 37-52 having been withdrawn as not being directed to elected subject matter, and new claim 53 having been added herein. No new matter has been added in new claim 53. Support for these amendments can be found throughout the specification of the instant application, including for example at paragraph [0127] and Figures 11-18.

Claims 34 and 36 are currently rejected under 35 U.S.C. §112, second paragraph. Claim 34 has been amended to recite a heat conductivity, and no longer recites a “high” heat conductivity or a “light weight.” Claim 36 has been amended to recite that the reinforcing member is arranged spaced from the surfaces of the first and second groups of permanent magnets by “a distance,” rather than by “exactly the distance,” whereby the density of the magnetic flux incident upon the surface of the reinforcing member becomes $1/2$ or less of the magnetic flux density of the magnets at the center of the surfaces of the facing first and second groups of permanent magnets, thereby making it clear that the claim encompasses multiple distance values rather than just a single exact distance value. No new matter has

been added by these amendments. Applicant respectfully submits that the rejections under 35 U.S.C. §112 have been overcome.

Claims 27 and 29-35 are currently rejected under 35 U.S.C. §103(a) based upon U.S. Patent No. 6,075,297 to Izawa (hereinafter the “Izawa” reference) in view of U.S. Patent No. 5,783,877 to Chityat (hereinafter the “Chityat” reference).

Claim 36 is currently rejected under 35 U.S.C. §103(a) based upon Izawa in view of Chityat, in further view of U.S. Publication No. 2003/0173836 to Inagaki et al. (hereinafter the “Inagaki” reference).

Independent claim 27 has been amended to recite that the movable member has a coil assembly and a nonmagnetic reinforcing member, that the coil assembly has at least three coils having rectangular cross-sections, the three coils forming a hollow shape and the nonmagnetic reinforcing member being fitted into the hollow shape, and that each coil is wound by a conductive metal wire. No new matter has been added by these amendments. Support for these amendments can be found throughout the specification of the instant application, including for example at paragraphs [0029], and [0034] – [0044], as well as in Figures 1-3 and 6.

Applicants respectfully submit that the cited references, either alone or in combination do not disclose or suggest each and every element of the independent claims as currently amended. In particular, none of the cited references, either alone or in combination, discloses or suggests a coil assembly including three coils having rectangular cross-sections, where the three coils form a hollow shape and the nonmagnetic reinforcing member is fitted into the hollow shape. Chittyat, for example, discloses three coils separately mounted next to each other onto a plurality of raised islands on a ceramic substrate 70, where each coil has its own hollow center and a separate raised island extends into each coil. Chittyat at Col. 8 lines 18-

23, and Fig. 6a. Chittyat thus does not disclose three coils having rectangular cross-sections, where the three coils form a hollow shape and the nonmagnetic reinforcing member is fitted into the hollow shape formed by all three coils.

CONCLUSION

In view of the amendments and remarks presented above, the Applicant respectfully submits that claims 27, 29-36 and 53 as currently presented are in a condition for allowance.

The Commissioner is hereby authorized to charge any additional fees that may be necessary, or credit any overpayment, to Deposit Account No. 50-3266, in the name of DLA Piper LLP (US).

Respectfully submitted,

DLA PIPER US LLP

A handwritten signature in black ink, appearing to read "Dale S. Lazar", is written over a horizontal line.

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